

# Bombing of Hamburg in World War II

The Allied bombing of Hamburg during World War II included numerous strategic bombing missions and diversion/nuisance raids. As a large port and industrial centre, Hamburg's shipyards, U-boat pens, and the Hamburg-Harburg area oil refineries were attacked throughout the war.<sup>[1]</sup>

The attack during the last week of July 1943, ***Operation Gomorrah***, created one of the largest firestorms raised by the Royal Air Force and United States Army Air Forces in World War II,<sup>[2]</sup> killing 42,600 civilians and wounding 37,000 in Hamburg and virtually destroying most of the city.<sup>[3]</sup> Before the development of the firestorm in Hamburg there had been no rain for some time and everything was very dry.<sup>[4]</sup> The unusually warm weather and good conditions meant that the bombing was highly concentrated around the intended targets and also created a vortex and whirling updraft of super-heated air which created a 460 meter high tornado of fire. Various other previously used techniques and devices were instrumental as well, such as area bombing, Pathfinders, and H2S radar, which came together to work with particular effectiveness. An early form of chaff, code named 'Window', was successfully used for the first time by the RAF – clouds of tinfoil strips dropped by Pathfinders as well as the initial bomber stream – in order to completely cloud German radar. The raids inflicted severe damage to German armaments production in Hamburg.



Artist John Martin's concept of the Biblical destruction of Sodom and Gomorrah, which inspired the operation's name



Typical bomb damage in the Eilbek district of Hamburg, 1944 or 1945

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## Naming

The name *Gomorra*h comes from that of one of the two Canaanite cities of Sodom and Gomorrah whose destruction is recorded in the Bible: "Then the Lord rained brimstone and fire on Sodom and Gomorra, from the Lord out of the heavens." – Genesis 19:24

## Significant missions

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### Battle of Hamburg

The Battle of Hamburg, codenamed *Operation Gomorra*h, was a campaign of air raids beginning 24 July 1943 and lasting for 8 days and 7 nights. It was at the time the heaviest assault in the history of aerial warfare and was later called the *Hiroshima of Germany* by British officials.<sup>[5]</sup>

Until the focus of RAF Bomber Command switched to Hamburg it had been on the Ruhr industrial region which had been the target of a five-month-long campaign.

The operation was conducted by RAF Bomber Command (including RCAF and RAAF Squadrons) and the USAAF Eighth Air Force. The British conducted night raids and the USAAF daylight raids.

The initial attack on Hamburg included two new introductions to the British planning: they used "Window", otherwise known as chaff, to confuse the German radar, while the Pathfinder Force aircraft, which normally kept radio silence, reported the winds they encountered, and this information was processed and relayed to the bomber force navigators.

No 35 Squadron led the target marking and, thanks to the clear weather and H2S radar navigation, accuracy was good, with markers falling close to the aiming point. On 24 July, at approximately 00:57, the first bombing started by the RAF and lasted almost an hour. The confusion caused to German radar kept losses of aircraft low. While some 40,000 firemen were available to tackle fires, control of their resources was damaged when the telephone exchange caught fire and rubble blocked the passage of fire engines through the city streets;<sup>[6]</sup> fires were still burning three days later.<sup>[7]</sup>

A second, daylight raid, by the USAAF was conducted at 16:40. It had been intended for 300 aircraft to attack Hamburg and Hanover but problems with assembling the force in the air meant that only 90 B-17 Flying Fortresses reached Hamburg. The bombers attacked the Blohm and Voss shipyard and an aero-engine factory, with German flak damaging 78 aircraft. In return the shipyard was not badly damaged and the aero-engine manufacturer could not be seen for smoke (a generating station was attacked instead). RAF Mosquitos of the Light Night Striking Force (LNSF) carried out nuisance raids to keep the city on a state of alert and delayed-action bombs from the night's raid exploded at intervals. Extra firemen were brought in from other cities including Hanover; as a result when the US bombers attacked, these firemen were in Hamburg and fires in Hanover burned unchecked.

Another attack by the RAF on Hamburg for that night was cancelled due to the problems the smoke would cause and 700 bombers raided Essen instead. Mosquitos carried out another nuisance raid.

A third raid was conducted on the morning of the 26th. The RAF night attack of 26 July at 00:20 was extremely light because of severe thunderstorms and high winds over the North Sea, during which a considerable number of bombers jettisoned the explosive part of their bomb loads (retaining just the incendiaries) with only two bomb drops reported. That



Lancaster over Hamburg, 30/31 January 1943

attack is often not counted when the total number of Operation Gomorrah attacks is given. There was no day raid on the 27th.

On the night of 27 July, shortly before midnight,<sup>[8]</sup> 787 RAF aircraft—74 Wellingtons, 116 Stirlings, 244 Halifaxes and 353 Lancasters—bombed Hamburg.<sup>[9]</sup> The unusually dry and warm weather, the concentration of the bombing in one area and firefighting limitations due to blockbuster bombs used in the early part of the raid—and the recall of Hanover's firecrews to their own city—culminated in a firestorm. The tornadic fire created a huge inferno with winds of up to 240 kilometres per hour (150 mph) reaching temperatures of 800 °C (1,470 °F) and altitudes in excess of 300 metres (1,000 ft), incinerating more than 21 square kilometres (8 sq mi) of the city. Asphalt streets burst into flame, and fuel oil from damaged and destroyed ships, barges and storage tanks spilled into the water of the canals and the harbour, causing them to ignite as well. The majority of deaths attributed to Operation Gomorrah occurred on this night. A large number of those killed died seeking safety in bomb shelters and cellars, the firestorm consuming the oxygen in the burning city above. The furious winds created by the firestorm had the power to sweep people up off the streets like dry leaves:

Some people who tried to walk along, they were pulled in by the fire, they all of the sudden disappeared right in front of you (...) You have to save yourself or try to get as far away from the fire, because the draught pulls you in.

— Ursula Gray (1974).<sup>[10]</sup>

On the night of 29 July, Hamburg was again attacked by over 700 RAF aircraft. A planned raid on 31 July was cancelled due to thunderstorms over the UK.<sup>[11]</sup> The last raid of Operation Gomorrah was conducted on 3 August.

Operation Gomorrah killed 42,600 people, left 37,000 wounded and caused some one million German civilians to flee the city.<sup>[3]</sup> The city's labour force was reduced by ten percent.<sup>[3]</sup> Approximately 3,000 aircraft were deployed, 9,000 tons of bombs were dropped and over 250,000 homes and houses were destroyed. No subsequent city raid shook Germany as did that on Hamburg; documents show that German officials were thoroughly alarmed and there is some indication from later Allied interrogations of Nazi officials that Hitler stated that further raids of similar weight would force Germany out of the war. The industrial losses were severe: Hamburg never recovered to full production, only doing so in essential armaments industries (in which maximum effort was made).<sup>[12]</sup> Figures given by German sources indicate that 183 large factories were destroyed out of 524 in the city and 4,118 smaller factories out of 9,068 were destroyed. Other losses included damage to or destruction of 580 industrial concerns and armaments works, 299 of which were important enough to be listed by name. Local transport systems were completely disrupted and did not return to normal for some time. Dwellings destroyed amounted to 214,350 out of 414,500.<sup>[13]</sup> Hamburg was hit by air raids another 69 times before the end of World War II. In total, the RAF dropped 22,580 long tons of bombs on Hamburg.<sup>[14]</sup>

## Aftermath

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### Cityscape

The totally destroyed quarter of Hammerbrook, in which mostly port workers lived, was not rebuilt as a housing area but as a commercial area. The adjoining quarter of Rothenburgsort shared the same fate, as only a small area of housing was rebuilt. The underground line which connected these areas with the central station was not rebuilt either.

In the destroyed residential areas many houses were rebuilt across the street and therefore do not form connected blocks anymore. The hills of the Öjendorfer Park are formed by the debris of destroyed houses.<sup>[15]</sup>

In January 1946, Major Cortez F. Enloe, a surgeon in the USAAF who worked on the United States Strategic Bombing Survey (USSBS), said that the fire effects of the atomic bomb dropped on Nagasaki "were not nearly as bad as the effects of the R.A.F. raids on Hamburg on July 27th 1943". He estimated more than 40,000 people died in Hamburg.<sup>[16]</sup>

"It was quite a surprise to us when the first Hamburg raid took place because you used some new device which was preventing the anti-aircraft guns to find your bombers, so you had a great success and you repeated these attacks on Hamburg several times and each time the new success was greater and the depression was larger, and I have said, in those days, in a meeting of the Air Ministry, that if you would repeat this success on four or five other German towns, then we would collapse." – Albert Speer – The Secret War

## Memorials

Several memorials in Hamburg are reminders of the air raids during World War II:

- The ruins of the Nikolaikirche (St. Nicholas Church), which was largely destroyed during the bombing, have been made into a memorial against war. The spire of the church survived the attacks.
- Memorial at the Hamburger Strasse – a memorial for those who died in a shelter under the Karstadt department store at the corner of Desenißstrasse and Hamburger Strasse. The department store was hit by a bomb on the night of 29 July. The people in the air raid shelter below were killed by the heat and carbon monoxide poisoning.
- The victims of the air raids were buried on the Ohlsdorf Cemetery in mass graves. The memorial "Passage over the Styx" by Gerhard Marcks is in the center and shows how Charon ferries a young couple, a mother with her child, a man and a despairing person over the river Styx.
- Many houses rebuilt after World War II show a memorial plaque with the inscription "Destroyed 1943 – 19\*\* Rebuilt " as a reminder of their destruction during the air raids in July 1943.



Sculpture at the main memorial, Nikolaikirche ruins.



Sculpture *Prayer for Peace* at the Nikolaikirche (Edith Breckwoldt, 2001).



Plaque on a Hamburg house says, "Destroyed 1943 \* 1957 rebuilt"



Memorial to the victims of the Hamburg bombings on Hamburger Strasse.<sup>[a]</sup>



Memorial *Passage over the Styx* at the Ohlsdorf Cemetery.



















## Timeline
















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Film footage of the bombing of Hamburg

## Raids on Hamburg during Second World War



















Date	Target/Type	Roundel and notes
night of 10/11 September 1939	leaflets	 10 RAF aircraft. <sup>[17]</sup>
night 17/18 May 1940	<u>oil installations</u>	 48 <u>Hampdens</u> attacked Hamburg oil installations. <sup>[18]</sup>
night 27/28 May 1940	oil refineries	 Hampdens attacked oil refineries near Hamburg. <sup>[18]</sup>
night 30/31 May 1940	oil refineries	 Hamburg oil refineries were bombed. <sup>[18]</sup>
June–October 1940		 Hamburg, Wilhelmshafen and Münster were frequent targets during the Battle of Britain (June–October 1940) but lack of bombing accuracy meant that little damage was done, <sup>[19]</sup> (See <u>Butt Report</u> (August 1941)).
night 20/21 October 1940		 Hamburg bombed by Wellingtons which started 12 fires with little loss of life. <sup>[19]</sup>
night 24/25 October 1940		 Hamburg bombed by Wellingtons which started 13 fires with little loss of life. <sup>[19]</sup>
nights of 15/16 November and 16/17 November 1940		 over 200 aircraft. On the first night damage was caused to the Blohm & Voss shipyard and over 60 fires were started. On the second night only 60 aircraft found their target and damage was far less. <sup>[b][20]</sup>
night of 12/13 March 1941		 Hamburg, Bremen, and Berlin bombed by a total of 257 <sup>[21]</sup>
The night of 13/14 March 1941		 51 people were killed, the highest number in a single raid to date <sup>[21]</sup>
April 1941		 During this month Hamburg was a main target. <sup>[21]</sup>
May 1941		 Hamburg was bombed several times during the month. Raids now usually contained about 100 bombers. <sup>[22]</sup>
The night of 11/12 May 1941		 92 aircraft. <sup>[22]</sup>
The night of 27/28 June 1941		 a raid on <u>Bremen</u> but most bombed Hamburg – an error of 50 miles. 11 out of 35 bombers were shot down by night fighters. <sup>[22]</sup>
night of 14/15 January 1942		 95 aircraft. Only 48 aircraft claimed to have bombed Hamburg. Altona station was hit and 12 fires, 7 of them large ones, were started. Six people killed and 22 injured. No aircraft reported lost. <sup>[23]</sup>
night of 15/16 January 1942		 96 aircraft. 52 bombers claimed to have bombed Hamburg successfully. 36 fires started 3 of which were large, 3 people killed and 25 injured. 11 Bombers lost. <sup>[23]</sup>
night of 17/18 January 1942		 Bremen was the main target for 83 aircraft, but Hamburg was bombed as a secondary target causing 11 fires and casualties of 5 dead and 12 injured in Hamburg. Four bombers lost. <sup>[23]</sup>
night of 16/17 February 1942		 one or two bombers. <sup>[24]</sup>



















Date	Target/Type	Roundel and notes
night of 8/9 April 1942		 largest raid to date on a single target. Carried out by 272 aircraft. Raid was considered a failure. 17 people were killed and 119 injured. 5 planes lost. <sup>[25]</sup>
The night of 17/18 April 1942		 173 aircraft. 75 fires, 33 classed as large were started. Twenty-three people were killed and 66 injured. Eight aircraft lost. <sup>[25]</sup>
The night of 3/4 May 1942		 81 aircraft, dispatched on the 100th anniversary of a great fire in Hamburg. 53 aircraft were estimated to have hit the target. 113 fires started, of which 57 were large. 77 were killed, 243 injured and 1,624 bombed out. 5 aircraft were lost. <sup>[26]</sup>
night of 26/27 July 1942		 403 aircraft. Widespread damage was caused, mostly in housing and semi-commercial districts rather than in the docks and industrial areas. At least 800 fires started, 523 of which were large. 823 houses were destroyed and more than 5,000 damaged. More than 14,000 people were bombed out. 337 people were killed and 1,027 injured. 29 aircraft were lost, 7.2% of the force. <sup>[27]</sup>
night of 28/29 July 1942		 256 aircraft. Due to bad weather only 68 bombed in the target area. Fifty-six fires, 15 of them large, were started. Thirteen people were killed and 48 injured. Bomber losses were high, 15.3% for the main group bombing that night. <sup>[27]</sup>
day of 3 August 1942		 10 aircraft. <sup>[28]</sup>
day of 18 August 1942	nuisance raid	 single <u>Mosquito</u> . <sup>[28]</sup>
day of 19 September 1942	nuisance raid	 2 Mosquitoes. <sup>[29]</sup>
night of 13/14 October 1942		 light secondary target raid. 2 large fires were started. 8 people were killed and 43 injured. <sup>[30]</sup>
night of 9/10 November 1942		 213 aircraft. There were 26 fires started of which 3 were large. 3 people killed and 16 injured. 15 aircraft lost, 7.0% of the force. <sup>[31]</sup>
night of 30/31 January 1943		 148 aircraft. It was the first H2S radar-assisted attack of the war. H2S use was not successful and the bombs were scattered. However 119 fires were started of which 71 were large. 58 people were killed and 164 injured. 5 aircraft were lost, 3.4% of the force. <sup>[32]</sup>
night of 3/4 February 1943		 263 aircraft. Bad weather affected the bombers with many turning back early. Damage was light for what was planned to be a large raid. 16 bombers were lost, 6.1% of the force, many to nightfighters. <sup>[33]</sup>
The night of 3/4 March 1943		 417 aircraft. The Pathfinders marked the wrong target, mistaking a mud bank for the docks with their H2S radar, so most of the bombs landed 13 miles downstream from the centre of Hamburg, around the small town of Wedel. Those bombs which landed on Hamburg did considerable damage starting 100 fires, killing 27 people and injuring 95. The damage to Wedel was extensive. 10 aircraft lost, 2.4% of the force. <sup>[34]</sup>
13/14 April 1943	nuisance raid	 2 Mosquitoes. <sup>[35]</sup>
25 June 1943	<u>Blohm &amp; Voss</u>	 Mission Number 67: 275 B-17 are to attack <u>submarine pens</u> and industrial areas of Hamburg and Bremen, but the primary targets are obscured by cloud so the bombers hit 167 bomb "targets of opportunity in NW Germany". <sup>[36]</sup> The 384th Bombardment Group of the USAAF are involved in the attack of an initial 19 aircraft, 11 aborted the mission and only 5 joined the combat wing. <sup>[37]</sup>




















Date	Target/Type	Roundel and notes
night of 26/27 June 1943	nuisance raid	 4 Mosquitoes. <sup>[38]</sup>
night of 28/29 June 1943	nuisance raid	 4 Mosquitoes. <sup>[38]</sup>
night of 3/4 July 1943	nuisance raid	 4 Mosquitoes. <sup>[9]</sup>
night of 5/6 July 1943	nuisance raid	 4 Mosquitoes. <sup>[9]</sup>
night of 24/25 July 1943	large raid	 791 Halifaxes and Lancasters marked the opening of the "Battle of Hamburg" or so called "Operation Gomorrah raid". A countermeasure against the radar-directed German nightfighters in the form of "Window" was used for the first time. In the clear weather visual and H2S marking was accurate and on the town centre. 728 aircraft dropped their bombs in 50 minutes. Less than half the force bombed within 3 miles of the centre with a bomb creepback of six miles. Damage was caused in the central and north-western districts, particularly in Altona, Eimsbüttel and Hoheluft. The Rathaus (Town Hall), the St. Nikolai church, the main police station, the main telephone exchange and the Hagenbeck Zoo were among the well-known landmarks to be hit. About 1,500 people were killed which was the largest outside the range of the "Oboe" radio navigation system which helped to concentrate the bombing pattern. Thanks to the use of Window only 12 aircraft were lost, 1.5% of the force. <sup>[9][39]</sup>
25 July 1943 16:40	<u>Blohm &amp; Voss</u>	 Mission Number 76. It is planned that 123 B-17 will bomb the diesel engine works at Hamburg but due to cloud cover, 100 planes from the 91st, 351st, 381st (= 1st combat wing), 303rd, 379th, 384th bomb group (= 41st combat wing) bomb the shipyards in a 15-minute period starting at 16:30. 15 B-17's are lost, and American casualties are 1 killed five wounded and 150 missing. <sup>[40][41]</sup>
26 July 1943	<u>Blohm &amp; Voss</u>	 Mission Number 77. 121 B-17's dispatched against Hanover (54) and the U-boat yards at Hamburg between 11:59 and 12:00 (71). <sup>[40][41]</sup>
The night of 26/27 July 1943	nuisance raid	 6 Mosquitoes attacked Hamburg. <sup>[9][42]</sup>
night of 27/28 July 1943	Large raid	 787 Halifaxes and Lancasters guided in by Pathfinders using H2S bombed about 2 miles east of city centre. Due to the unseasonably dry conditions, a firestorm was created in the built-up working-class districts of Hammerbrook, Hamm, Borgfelde and Rothenburgsort. The bombing was more concentrated than the RAF was usually able to manage at this stage of the war. In just over half an hour it is estimated that 550–600 bomb loads fell into an area measuring only 2 miles by 1 mile and this gradually spread the fire eastwards. The firestorm lasted for about three hours, consuming approximately 16,000 multi-storied apartment buildings and killing an estimated 30,000 people, most of them by carbon monoxide poisoning when all the air was drawn out of their basement shelters. Fearing further raids, two-thirds of Hamburg's population, approximately 1,200,000 people, fled the city in the aftermath. <sup>[9][43]</sup>
night of 28/29 July 1943	nuisance raid	 4 Mosquitoes. <sup>[9]</sup>



Date	Target/Type	Roundel and notes
night of 29/30 July 1943	Large raid	 777 aircraft guided in by pathfinders marking using H2S. The plan was to bomb the untouched northern suburbs. But a mistake in mapping led to the bombing of an area just north of the area devastated by the firestorm three nights before. The residential areas of Wandsbek and Barmbek districts and parts of the Uhlenhorst and Winterhude were severely damaged and widespread fires but no firestorm. Twenty-eight aircraft 3.6% of the force was lost. <sup>[9][44]</sup>
night of 2/3 August 1943		 740 aircraft dispatched on a raid to Hamburg but bad weather stopped all but a few bombers reaching Hamburg; many bombed secondary targets instead. 30 aircraft, 4.1% of the force was lost. <sup>[45]</sup>
night of 22/23 August 1943	nuisance raid	 6 Mosquitoes. <sup>[46]</sup>
night of 5/6 November 1943		 Hamburg and other cities raided by a total of 26 Mosquitoes. <sup>[47]</sup>
night of 1/2 January 1944	diversionary raid (Berlin)	 15 Mosquitoes attacked Hamburg. <sup>[48]</sup>
night of 11/12 March 1944	nuisance raid	 20 Mosquitoes. <sup>[49]</sup>
night of 6/7 April 1944		 35 Mosquitoes. <sup>[50]</sup>
night of 26/27 April 1944	diversionary raid	 16 Mosquitoes. <sup>[50]</sup>
night of 28/29 April 1944		 26 Mosquitoes. <sup>[50]</sup>
18 June 1944	oil refineries	 Mission 421: B-17s bombed <i>Hamburg-Ebano</i> (18), <i>Hamburg-Eurotank</i> (54), <i>Hamburg-Ossag</i> (38), and <i>Hamburg-Schindler</i> (36). <sup>[51]</sup> a <u>Battle of the Ruhr</u> mission (including the 92 BG)
20 June 1944	oil refineries	 Mission 425: B-17s bombed oil refineries at <i>Hamburg/Deut.Petr.AG</i> (53), <i>Harburg/Ebano</i> (60), <i>Hamburg/Eurotank</i> (107), <i>Hamburg/Rhenania-Ossag</i> (50), <i>Harburg/Rhenania</i> (53), <i>Hamburg/Schliemanns</i> (54), and <i>Hamburg/Schindler</i> (26). <sup>[51]</sup>
night of 22/23 June 1944	diversionary raid	 29 Mosquitoes. <sup>[52]</sup>
night of 22/23 July 1944	diversionary raid	 26 Mosquitoes. <sup>[53]</sup>
night of 26/27 July 1944	diversionary raid	 30 Mosquitoes. <sup>[53]</sup>
night of 29/29 July 1944		 307 aircraft. The raid was not a success, the bombing was scattered and German sources estimated that only 120 bombers landed their load on the city. 22 aircraft were lost mainly to night fighters. <sup>[53]</sup>
4 August 1944	oil refineries	 Mission 514: 181 B-17s bombed Hamburg refineries. <sup>[54]</sup>
6 August 1944	oil refineries	 Mission 524: Hamburg oil refineries bombed at <i>Hamburg/Deutsche</i> (54), <i>Hamburg/Eband</i> [ <i>sic</i> ] (33), <i>Hamburg/Rhenania</i> (61), <i>Hamburg/Rhenania-Ossag</i> (62), <i>Hamburg/Schlieman</i> (32), and <i>Hamburg/Schulau</i> (72 B-17s). <sup>[54]</sup> <i>Rhenania-Ossag</i> was a subsidiary of <i>Royal Dutch Shell</i> .
night of 26/27 August 1944	diversionary nuisance raid	 13 Mosquitoes. <sup>[55]</sup>

Date	Target/Type	Roundel and notes
night of 29/30 August 1944	diversionary nuisance raid	 Hamburg was one of five cities bombed by a total of 53 Mosquitoes. <sup>[55]</sup>
night of 6/7 September 1944	nuisance raid	 32 Mosquitoes. <sup>[56]</sup>
night of 26/27 September 1944	diversionary nuisance raid	 6 Mosquitoes. <sup>[56]</sup>
night of 30/1 October 1944		 46 Mosquitoes. <sup>[57]</sup>
6 October 1944	oil refinery (Harburg/Rhenania)	 Mission 667: 121 of 406 dispatched B-24s bombed the Harburg/Rhenania oil refinery. <sup>[58]</sup>
night of 12/13 October 1944		 52 Mosquitoes. <sup>[57]</sup>
25 October 1944	oil refineries	 Mission 688: 455 B-17s dispatched to hit the Harburg (221, including those of the 447th BG) and Rhenania oil refineries (214) at Hamburg. 297 B-17s dispatched to hit the primary hit secondaries, Harburg (179) and Rhenania oil refineries (106) at Hamburg. (cloud cover limited accuracy, devastation of Harburg city) <sup>[58][59]</sup>
30 October 1944	oil refineries	 Mission 693: 357 B-24s are dispatched to hit the Harburg oil refinery (72) and Rhenania oil refinery (67) at Hamburg, 28 bomb Hamburg targets of opportunity. <sup>[58]</sup>
4 November 1944	oil refinery	 Mission 700: 257 B-17s are dispatched to hit the Harburg oil plant at Hamburg (238), 186 of 193 B-17s hit the Rhenania oil plant at Hamburg. <sup>[60]</sup>
5 November 1944	ordnance depots	 US Ninth (Tactical) Air Force: send 160 B-26s and A-20s to attack ammunition, ordnance, and supply depots in Hamburg. <sup>[60]</sup>
6 November 1944	oil refineries	 Mission 704: 291 B-17s are dispatched to hit the Harburg (142) and Rhenania (138) oil refineries at Hamburg. <sup>[60]</sup>
night of 11/12 November 1944	oil refineries	 237 Lancasters and 8 Mosquitoes of No 5 Group are dispatched to hit the Rhenania-Ossag oil refinery Harburg, which had been attacked several times by American day bombers. <sup>[61]</sup>
21 November 1944	oil refineries	 Mission 720: 366 B-24s are sent to hit the Dpag (178) and Rhenania (171) oil plants at Hamburg. (cloud cover limited accuracy, devastation of Harburg city) <sup>[60][62]</sup>
night of 30/1 December 1944	diversionary raid	 53 Mosquitoes. <sup>[63]</sup>
night of 11/12 December 1944		 28 Mosquitoes. <sup>[63]</sup>
night of 27/28 December 1944	nuisance raid	 7 Mosquitoes hit Hamburg-Wandsbek and -Barmbek at 3 am. <sup>[63][64]</sup>
31 December 1944	<u>Blohm &amp; Voss</u>	 Mission 772: 526 B-17s are dispatched to hit oil industry targets at Hamburg (68), the Wilhelmsburg refinery at Harburg (92), the Grassbrook refinery at Hamburg (71) and the industrial area at Hamburg (72). <sup>[65]</sup>
night of 16/17 January 1945	diversionary nuisance raid	 9 Mosquitoes. <sup>[66]</sup>

Date	Target/Type	Roundel and notes
24 February 1945	<u>Blohm &amp; Voss</u>	 The 384 BG bombed the Hamburg submarine yards.
24 February 1945	oil refineries	 Mission 845: 362 B-17s are sent to hit the <u>Albrecht 278</u> and <u>Harburg 70</u> oil refineries at Hamburg. <sup>[67]</sup>
5 March 1945	oil refinery	 Mission 865: 120 of 126 B-24s hit the Harburg oil refinery at Hamburg without loss. <sup>[68]</sup>
8/9 March 1945	<u>Blohm &amp; Voss</u>	 312 aircraft, including those of the No. 466 Squadron RAAF, bombed <u>Blohm &amp; Voss</u> to destroy the type XXI <u>U-boats</u> (cloud cover limited accuracy). <sup>[69]</sup>
10 March 1945	<u>Blohm &amp; Voss</u>	 The No. 466 Squadron RAAF bombed <u>Blohm &amp; Voss</u> . <sup>[69]</sup>
11 March 1945	oil refinery	 Mission 881: 469 of 485 B-17s bomb the Wilhelmsburg oil refinery at Hamburg; one other hits a target of opportunity; one B-17 is lost and 41 damaged; 3 airmen are wounded and 10 are missing in action. <sup>[68]</sup>
20 March 1945	shipyards, docs and oil installations	 Mission 898: 451 bombers and 355 fighters are dispatched to bomb the shipyard and dock area at Hamburg and an oil refinery. All the targets were bombed including the Blohm & Voss U-boat yard. <sup>[68]</sup>
night of 21/22 March 1945	oil refinery (Erdölwerke)	 159 aircraft put the refinery out of action for the rest of the war. <sup>[69]</sup>
30 March 1945	oil depot	 Mission 918: 530 B-17s are sent to bomb 2 U-boat yards oil depot at Hamburg. 64 bomb the yards and 169 the depot. 263 bomb the port area at Hamburg (the secondary target) and one bombs Bremen (a target of opportunity). Bombing is both visual and using H2X radar. <sup>[68]</sup>
night of 30/31 March 1945		 raid by 43 Mosquitoes. <sup>[69]</sup>
day of 31 March 1945	<u>Blohm &amp; Voss</u>	 469 aircraft to destroy the Type XXI U-boats under construction. Cloud cover prevented serious damage to the target, but there was considerable damage to houses, factories, energy supplies and communications over a wide area of southern Hamburg. 11 aircraft lost mainly to German day fighters. <sup>[69]</sup>
night of 2/3 April 1945	nuisance raid	 1 Mosquito. <sup>[70]</sup>
8 April 1945	U-boat yard	 A DISNEY mission: 22 of 24 B-17s bomb the Finkenwarder U-boat yard at Hamburg without loss. <sup>[71]</sup>
night of 8/9 April 1945	shipyard	 440 aircraft—partial cloud caused the raid to become dispersed. There was some damage to the yards but it was not clear whether the damage was American or British or both. <sup>[70]</sup>
day of 9 April 1945	oil storage	 57 Lancasters of No. 5 Group RAF attacked oil-storage tanks (40 aircraft) and U-boat shelters (17 aircraft of No. 617 "Dambuster" Squadron with <u>Grand Slams</u> and <u>Tallboy</u> bombs). Both attacks were successful. 2 Lancasters were lost from the raid on the oil tanks. <sup>[70]</sup>
night of 9/10 April 1945	diversionary raid	 24 Mosquitoes. <sup>[70]</sup>
The night of 13/14 April 1945	diversionary raid	 87 Mosquitoes. <sup>[70]</sup>

## Notes

- a. Memorial inscription reads: "On the night of 29 July 1943, 370 persons perished in the air-raid shelter on the Hamburgerstrasse in a bombing raid. Remember these dead. Never again fascism. Never again war".
- b. These two nights of bombing were only 24 hours after a very large raid by the German Luftwaffe on Coventry on the night of 14/15 November 1940. However the raid must have been planned more than 24 hours in advance, so although these raids are often stated to be revenge attacks, it is unlikely that they were planned to be so.

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10. Time Witness Ursula Gray in "Volume 21: Nemesis", *The World at War* – Produced and Directed by Martin Smith, Written by Stuart Hood, Narrator: Laurence Olivier – Thames Television London (UK) 1973–1974, released on Video 13-6-1995
11. Wilson 2005, p. 270.
12. Frankland & Webster 1961, p. 261.
13. Frankland & Webster 1961, p. 262.
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## External links

- An eyewitness account ([https://web.archive.org/web/20101003105517/http://www.seniorennet-hamburg.de/zeitzeugen/vergessen/english/klank1\\_eng.htm](https://web.archive.org/web/20101003105517/http://www.seniorennet-hamburg.de/zeitzeugen/vergessen/english/klank1_eng.htm))
- Remnants from world war II in Hamburg (<http://www.battlefieldsw2.com/remnants-from-world-war-ii-in-hamburg.html>)

### External video

 „Gefangen im Glut-Orkan“ ([http://einestages.spiegel.de/static/topicalbumgallery/2405/gefangen\\_im\\_glut\\_orkan.html](http://einestages.spiegel.de/static/topicalbumgallery/2405/gefangen_im_glut_orkan.html))

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**This page was last edited on 25 December 2017, at 12:31.**

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